SEQUENCE LISTING

DIVERSA CORPORATION SHORT, Jay KRETZ, Keith

RECOMBINANT BACTERIAL PHYTASES AND USES THEREOF

<130> DIVER1370-6

<140> US 09/777,566

<141> 2001-02-05

<150> US 09/318,528

<151> 1999-05-25

<150> US 09/291,931

<151> 1999-04-13

<150> US 09/259,214

<151> 1999-03-01

<150> US 08/910,798

<151> 1997-08-13

<160>

<170> PatentIn version 3.0

<210> 1

<211> 1323

<212> DNA

<213> Escherichia coli

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<221> CDS

<222> (1)..(1320)

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<221> misc_feature

<222> (1)..(1323)

<223> n is any nucleotide

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ccg caa tct gca ttc gct cag agt gag ccg gag ctg aag ctg gaa agt Pro Gln Ser Ala Phe Ala Gln Ser Glu Pro Glu Leu Lys Leu Glu Ser 20 30

gtg gtg att gtc agt cgt cat ggt gtg cgt gct cca acc aag gcc acg

Val Val Ile Val Ser Arg His Gly Val Arg Ala Pro Thr Lys Ala Thr 35

caa ctg atg cag gat gtc acc cca gac gca tgg cca acc tgg ccg gta Gln Leu Met Gln Asp Val Thr Pro Asp Ala Trp Pro Thr Trp Pro Val

144

192

													•			
			tgg Trp	Leu												240
			caa Gln													288
			ccg Pro 100													336
	_		cgt Arg				_	_		_	_		_	_		384
			ata Ile													432
_			aat Asn						_	_		_	_			480
			gac Asp				_		_					_	_	528
			cat His 180													576
			caa Gln													624
			tta Leu													672
			tca Ser													720
			ctc Leu													768
			acc Thr 260													816
			ttt Phe													864
			ccg Pro													912
сса	ccg	caa	aaa	cag	gcg	tat	ggt	gtg	aca	tta	ccc	act	tca	gta	ctg	960

	Pro 305	Pro	Gln	Lys	Gln	Ala 310	Tyr	Gly	Val	Thr	Leu 315	.Pro	Thr	Ser	Val	Leu 320	
									ctg Leu								1008
					_				cag Gln 345	_	_		_	_			1056
		_	-			_			cgt Arg			_	_		_	_	1104
									cag Gln								1152
									ccg Pro								1200
	_	_		_	_		_		gcg Ala	_		_	_	_	_	-	1248
			_					_	gca Ala 425	-		_		_	_	_	1296
	_					cac His			taa								1323
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	Pro	Gln	Ser	Ala 20	Phe	Ala	Gln	Ser	Glu 25	Pro	Glu	Leu	Lys	Leu 30	Glu	Ser	
	Val	Val	Ile 35	Val	Ser	Arg	His	Gly 40	Val	Arg	Ala	Pro	Thr 45	Lys	Ala	Thr	

Gln Leu Met Gln Asp Val Thr Pro Asp Ala Trp Pro Thr Trp Pro Val

Lys Leu Gly Trp Leu Thr Pro Arg Gly Glu Leu Ile Ala Tyr Leu Gly His Tyr Gln Arg Gln Arg Leu Val Ala Asp Gly Leu Leu Ala Lys Lys Gly Cys Pro Gln Ser Gly Gln Val Ala Ile Ile Ala Asp Val Asp Glu Arg Thr Arg Lys Thr Gly Glu Ala Phe Ala Ala Gly Leu Ala Pro Asp Cys Ala Ile Thr Val His Thr Gln Ala Asp Thr Ser Ser Pro Asp Pro Leu Phe Asn Pro Leu Lys Thr Gly Val Cys Gln Leu Asp Asn Ala Asn Val Thr Asp Ala Ile Leu Ser Arg Ala Gly Gly Ser Ile Ala Asp Phe Thr Gly His Arg Gln Thr Ala Phe Arg Glu Leu Glu Arg Val Leu Asn Phe Pro Gln Ser Asn Leu Cys Leu Lys Arg Glu Lys Gln Asp Glu Ser Cys Ser Leu Thr Gln Ala Leu Pro Ser Glu Leu Lys Val Ser Ala Asp Asn Val Ser Leu Thr Gly Ala Val Ser Leu Ala Ser Met Leu Thr Glu Ile Phe Leu Leu Gln Gln Ala Gln Gly Met Pro Glu Pro Gly Trp Gly Arg Ile Thr Asp Ser His Gln Trp Asn Thr Leu Leu Ser Leu His Asn Ala Gln Phe Tyr Leu Leu Gln Arg Thr Pro Glu Val Ala Arg Ser

Arg Ala Thr Pro Leu Leu Asp Leu Ile Met Ala Ala Leu Thr Pro His

Pro Pro Gln Lys Gln Ala Tyr Gly Val Thr Leu Pro Thr Ser Val Leu Phe Ile Ala Gly His Asp Thr Asn Leu Ala Asn Leu Gly Gly Ala Leu 325 Glu Leu Asn Trp Thr Leu Pro Gly Gln Pro Asp Asn Thr Pro Pro Gly 340 345 Gly Glu Leu Val Phe Glu Arg Trp Arg Arg Leu Ser Asp Asn Ser Gln 355 360 Trp Ile Gln Val Ser Leu Val Phe Gln Thr Leu Gln Gln Met Arg Asp 370 375 Lys Thr Pro Leu Ser Leu Asn Thr Pro Pro Gly Glu Val Lys Leu Thr 385 390 395 Leu Ala Gly Cys Glu Glu Arg Asn Ala Gln Gly Met Cys Ser Leu Ala 405 410 Gly Phe Thr Gln Ile Val Asn Glu Ala Arg Ile Pro Ala Cys Ser Leu 420 425 430 Arg Ser His His His His His 435 <210> <211> 49 <212> DNA <213> Artificial sequence <220> <223> Primer for PCR 49 gtttctgaat tcaaggagga atttaaatga aagcgatctt aatcccatt <210> <211> 33 <212> DNA <213> Artificial sequence <220> <223> Primer for PCR <400> 4 gtttctggat ccttacaaac tgcacgccgg tat

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